

TITLE OF GROUP CLASSES : ENGINEERING TECHNICIAN II

TITLE OF CLASSES IN GROUP:	Class Code:	EO:
CONSTRUCTION & MAINTENANCE	02770701	E
MATERIALS	02770702	E
SURVEY	02770703	E
ADMINISTRATIVE SERVICES	02770704	E
CONSTRUCTION RECORDS	02770705	C
		Pay Grade: 19A

CLASS DEFINITION

GENERAL STATEMENT OF DUTIES: Under supervision, to perform civil engineering work, at the beginning level, in the area of specialization indicated by the title of the class of position; and to do related work as required.

SUPERVISION RECEIVED: Works under the immediate supervision of a civil engineer or engineering technician of higher rank in accordance with specific instructions; work is reviewed frequently in process and upon completion for results obtained.

SUPERVISION EXERCISED: When required, may supervise the work of non-engineer personnel assigned to assist.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

Under supervision, in the area of specialization indicated in the title of the class of position:

Construction and Maintenance:

To assist a civil engineer, or an engineering technician of a higher classification, in the inspection of all materials going into a bridge or road construction or maintenance project; to assemble data for weekly estimates of work accomplished under contract item; to assist in the preparation of work progress reports.

To enforce plans, special provision contracts, detailed estimates and specifications during the construction and/or repair of a building or other project; to perform surveying and drafting work; to prepare topographic and profile drawings as required; to consult with, and render advice to contractors and/or their representatives regarding the interpretation of plans, specifications and estimates; to study and evaluate requests by contractors for changes in plans during construction; to approve minor changes on some projects and to submit all others to a superior for approval.

In accordance with specific instructions, to inspect the workmanship and practices of contractors and state crews performing road construction or maintenance work; to check road construction or maintenance work in process and report, immediately, findings contrary to plans and specifications for such work.

Materials:

To assist a professional civil engineer, or an engineering technician of a higher classification, in materials testing activities; to assist in the taking and testing of sample aggregates, mixes, asphalt, steel and other materials used in highway or bridge construction; to assist in the preparation of materials survey reports; and to assist in materials research.

Survey:

To operate a transit and other types of levels used in locating center lines, locating curves, running horizontal and vertical angles, setting transit points, reading bearings, determining drainage areas and reading stadia; to act as survey leader during absence of superior.

Administrative Services:

To assist in the preparation of contracts and specifications for preliminary engineering, construction, reconstruction and maintenance of state highways and bridges; to ascertain all items in a specific contract (preliminary engineering or construction) are fulfilled according to state and federal policy and requirements; to monitor all preliminary engineering contracts; to prepare quantity computations and cost estimates for contract proposals; to assist in updating the Secondary Road Plan; to review and verify final quantities used in various construction projects in the transportation area insuring that all work accomplished conforms with state and federal requirements.

Construction Records:

To utilize standardized computer software applications in order to set up, input and maintain all record keeping documentation's for bridge and/or road construction projects; to ensure that computerized records are maintained consistent with the Procedures of Uniform Record Keeping (PURK); to enter into a personal computer daily time slips and back up for work performed by contractors; to consolidate vital specific project data and prepare reports thereon related to item ledger sheets, other project worksheets, materials reports, and time sheets for projects; to enter via the use of a personal computer the specific data as it relates to the appropriate category; to assist in the preparation of and to enter Reports of Change, contract agenda, bi-weekly progress payments, correspondence updates and other information related to the project; to maintain accountability of all phases of construction activity through the utilization of a computerized construction record keeping system; to utilize established practices and procedures resulting in the finalization of the record keeping process for the project upon project completion.

To assist in establishing policies and procedures to provide a uniform and effective training program for RIDOT/Public Works personnel; check plans, cross-sections, diagrams, sketch computation sheets and all trigonometric and engineering mathematical formulas; to do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A familiarity with, and the ability to apply, the basic principles and practices of civil engineering applicable to the area of specialization indicated in the title of this class of position; a familiarity with the kinds of basic materials, elements or products of the area of specialization indicated in the title of the class of position; a familiarity with equipment (to include on-line data terminals), instruments, techniques and procedures applicable to the area of specialization indicated in the title of the class of position; a familiarity with the ability to apply the basic principles of the system of measurement applicable to the area of specialization indicated in the title of the class of position; a familiarity with procedures, rules, guidelines and standards in the area of specialization indicated in the title of the class of position; the ability to read and interpret technical specifications and civil engineering plans, drawings and maps; the ability to prepare clear, sound, accurate and informative reports; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from senior high school, including or supplemented by courses in accounting, mathematics, horticulture, science and mechanical drawing as required in the area of specialization indicated by the title in the class of position; and

Experience: Such as may have been gained through: employment involving the performance of construction inspection, landscape inspection, materials testing, surveying, drafting or office work which required the application of some accounting principles and the preparation of accurate reports as required in the area of specialization indicated by the title in the class of position.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class Revised: June 6, 1998

Editorial Review: 3/15/03